

ABSTRACT OF THE DISCLOSURE

A lightweight, structurally strong skin panel having one or more transparent areas forming see-through windows, and a method of making same.

- 5 A pre-impregnated resin tape comprised of a plurality of fibers impressed into a resin is provided. A metal sheet is provided. The pre-impregnated resin tape and the metal sheet are layered onto a molding tool such that the metal sheet and the pre-impregnated resin tape are aligned one atop the other. The tool, metal sheet, and pre-impregnated resin tape are heated such that the resin flows
- 10 and at least partially covers the metal sheet and the fibers. The resin and fibers are substantially transparent to form a see-through window portion in the skin panel. The transparent window skin panel eliminates the bulky and heavy frame structure traditionally employed on aircraft, and which has heretofore limited the size of aircraft windows.

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